

BACKGROUND INFORMATION FOR THE
DRAFT CAAPP PERMIT FOR
Union Electric Company d/b/a AmerenUE - Venice Power Plant

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

Venice power station is located at 701 Main Street, Venice, Madison County. The plant consists of eight utility boilers that produce steam to drive turbine generators for the production of electricity. The utility boilers are not currently being operated. The main plant also includes an auxiliary boiler. In addition, the station has a gas turbine that drives an electric generator. The source is capable of operating with natural gas and distillate fuel oil. AmerenUE also installed a Twin Pac combustion turbine in 2002 that burns natural gas as primary fuel and distillate oil as a back-up fuel.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Emission Control Equipment
CTG 2	One 60 MWe, Twin Pac Natural Gas Fired Turbine with Distillate Oil as back-up fuel (2002)	Water Injection
CTG 1	Stationary gas turbine that drives a generator (nominal capacity 518 mmBtu/hr) (1967)	None
T-6	Underground gasoline storage tank (550 gallon)	Submerged loading pipe
Aux. Boiler (B-9)	Natural Gas or distillate fuel oil fired boiler producing steam to provide building heat (nominal capacity 37 mmBtu/hr) (1988)	None
B-1	Natural Gas or distillate fuel oil fired boiler producing steam to drive turbine generators (nominal capacity 569 mmBtu/hr) (1942)	None
B-2	Natural Gas or distillate fuel oil fired boiler producing steam to drive turbine generators (nominal capacity 569 mmBtu/hr) (1942)	None
B-3	Natural Gas or distillate fuel oil fired boiler producing steam to drive turbine generators (nominal capacity 590 mmBtu/hr) (1943)	None

Emission Unit	Description	Emission Control Equipment
B-4	Natural Gas or distillate fuel oil fired boiler producing steam to drive turbine generators (nominal capacity 590 mmBtu/hr) (1943)	None
B-5	Natural Gas or distillate fuel oil fired boiler producing steam to drive turbine generators (nominal capacity 570 mmBtu/hr) (1948)	None
B-6	Natural Gas or distillate fuel oil fired boiler producing steam to drive turbine generators (nominal capacity 570 mmBtu/hr) (1948)	None
B-7	Natural Gas or distillate fuel oil fired boiler producing steam to drive turbine generators (nominal capacity 1480 mmBtu/hr) (1950)	None
B-8	Natural Gas or distillate fuel oil fired boiler producing steam to drive turbine generators (nominal capacity 1480 mmBtu/hr) (1950)	None

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Pollutant	Tons/Year
Volatile Organic Material (VOM)	32.45
Sulfur Dioxide (SO ₂)	952.50
Particulate Matter (PM)	67.97
Nitrogen Oxides (NO _x)	638.33
HAP, not included in VOM or PM	-
TOTAL	1691.25

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

This source will be an affected source subject to the NO_x Trading Program. This is a new interstate market-based program designed to reduce NO_x emissions from electric power plants and other large NO_x sources beginning in 2004. One of the administrative requirements of this permit for an affected source is to hold a "budget permit", which sets forth the various requirements of the NO_x Trading Program that would apply to the affected source. The Illinois EPA is proposing to include this budget permit in Section 6.0 of this CAAPP.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.